

NF Dry Cottonwood Creek habitat enhancement
FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

Please fill in the highlighted areas
all sections (IA, IB, IC, etc.) must be addressed or the application will be considered invalid

I. APPLICANT INFORMATION

- A. Applicant Name: Clark Fork Coalition
- B. Mailing Address: Box 7593
- C. City: Missoula State: MT Zip: 59807
Telephone: 406-542-0539 E-mail: info@clarkfork.org
- D. Contact Person: Will McDowell
Address if different from Applicant: _____
City: _____ State: _____ Zip: _____
Telephone: 406-396-7716 E-mail: will@clarkfork.org
- E. Landowner and/or Lessee Name (if other than Applicant): U.S. Forest Service, Beaverhead Dee Lodge NF
Mailing Address: Pintler Ranger District 88 Business Loop
City: Philipsburg State: MT Zip: 59858
Telephone: 406-859-3211 E-mail: phooper@fs.fed.us

II. PROJECT INFORMATION*

- A. Project Name: North Fork of Dry Cottonwood Habitat Enhancement Project
River, stream, or lake: North Fork of Dry Cottonwood (Upper Clark Fork basin)
Location: Township: T5N Range: R8W Section: 3,4,5
Latitude: 46.2089 Longitude: -112.5900 *within project (decimal degrees)*
County: Deer Lodge
- B. Purpose of Project:
This project will enhance westslope cutthroat trout spawning and rearing habitat along about three miles of stream in the Pintler Ranger District, by reducing livestock impact.
- C. Brief Project Description: _____

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The North Fork of Dry Cottonwood is a headwater tributary to the Upper Clark Fork south-east of Deer Lodge. It harbors westslope cutthroat trout, and no other trout species. The main constraint on this native trout population is excessive riparian and aquatic habitat damage from summer livestock grazing on a USFS allotment. The Beaverhead Deer Lodge National Forest (USFS) and Clark Fork Coalition (CFC) are partnering up to address this habitat degradation and improve conditions for this native trout population.

The USFS Dry Cottonwood Allotment hosts about 500 cow-calf pairs from June 15 to October 1st, which is prime spawning and rearing time for westslope cutthroat, a Species of Concern for the Forest Service. During this time, cattle concentrate along stream banks as weather gets hotter, and water gets scarce. This concentration of livestock impact tramples stream banks and cutthroat trout redds, reduces woody vegetation cover and shade, and impairs water quality. The Pintler Ranger District is monitoring riparian conditions more closely in the last few years. It issued a "non-compliance" letter to these grazing allotment holders in 2016 due to excessive livestock impact in the North Fork riparian area, and is developing stricter requirements.

To reduce livestock impact on these aquatic resources, this project will develop new off-stream stock water, and physically reduce livestock access to the stream banks, to encourage regeneration of more vigorous shrub growth along the channel, and protect water quality. The East Deer Lodge Landscape Project ROD specifically requires restoration actions in this drainage: install a new off-stream stock water system (springbox, pipeline and tank), repair all existing tanks, fencing certain sensitive riparian areas, and do riparian tree-felling (using beetle-killed lodgepole) to "jackstraw" logs along the stream banks. Jack-strawing logs across the creek will impede livestock access to the stream banks (dead lodgepole is abundant in this environment). In 2016 the allottees repaired all existing stock tanks.

For 2018 the BVDL Forest and Clark Fork Coalition plan to implement the following NEPA-approved activities as part of this Project:

- *Installation of one new off-stream stock water tank in NF Dry Cottonwood.
- *Riparian fencing on 8 acres of a headwaters meadow.
- *About two miles of riparian tree felling along NF Dry Cottonwood Creek.

The stock water development will be a combination of spring box (4" perf pipe with gravel bed and plastic cutoff), short buried pipeline (350 feet) and fiberglass stock tank with float control. The stock water development site has been field-inspected by USFS and CFC staff. The source area will be fenced. The US Forest Service will provide the stock water tank. The Clark Fork Coalition will provide \$10,000 for a 12-person tree-felling team from Montana Conservation Corps to do the riparian "jack straw" treatment, and supervise all elements of the project, including stock water system installation, and fencing. The partners are asking MFWP Future Fisheries to support the stock water system, and match the CF Coalition's support for riparian fencing.

This work fits into a larger scheme of aquatic habitat improvements in Dry Cottonwood Cr., where the CFC and USFS have been working for several years on riparian fencing, on resolving fish passage and flow issues, and on road sediment issues along USFS Road 85, as part of comprehensive watershed restoration activities in the East Deer Lodge valley.

D. Length of stream or size of lake that will be treated: **Three miles of stream (total)**

E. Project Budget:

Grant Request (Dollars): \$ 12,707.50

Contribution by Applicant (Dollars): \$ 19,138

In-kind \$ 0

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(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): \$ 0 In-kind \$ 1230
(attach verification - See page 2 budget template)

Total Project Cost: \$ 33,075.50

F. Attach itemized (line item) budget – see template

Attach **specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support and fish biologist support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete a *supplemental questionnaire***
(fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. **Attach land management & maintenance plans that will ensure protection of the reclaimed area.**

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Westslope cutthroat trout are the primary species that will benefit. NF Dry Cottonwood only has westslope cutthroats trout (95% genetically pure)—no competitive non-native fish are present.

B. How will the project protect or enhance wild fish habitat?:

The project is designed to protect spawning and rearing habitat for the native trout population by limiting livestock access to and impact on the stream bed and stream banks.

C. Will the project improve fish populations and/or fishing? To what extent?:

We expect to see fish populations improve within this stream system as habitat and cover improve. The NF Dry Cottonwood population is connected to larger cutthroat populations downstream, especially the population centered on a beaver pond complex about three miles downstream. The North Fork population is being reconnected to the South Fork cutthroat trout population by fish passage projects. There may eventually be out-migration to the Clark Fork River, providing potential recruitment of fluvial fish to the river, as downstream conditions of water quantity and water quality are improving.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

The public can fish on Dry Cottonwood, particularly at beaver ponds on public land. So increasing wild native trout populations there could provide more fishing opportunities in the stream, and in the Clark Fork River, if there is successful recruitment to the river in the future.

E. The project agreement includes a 20-year maintenance commitment. Please discuss your ability to meet this commitment.

Maintenance of the livestock water system and fences is responsibility of the National Forest allottees. The USFS range specialist requires this maintenance. The riparian tree-felling will not require maintenance, but should naturally transition to a thicker riparian shrub habitat.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

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The primary cause of habitat degradation in this drainage is livestock impact during the summer and early fall, including physical impact on stream banks, trampling of redds, and over-browsing of riparian woody plants (dogwood, willow, aspen). This is a small stream (<4 ft wetted width), with decomposed granitic soils, and is very susceptible to heavy livestock impact. The Project will reduce access of cattle to the stream bed and stream banks, and provide an alternate livestock water source. The USFS is considering adjusting grazing in this area, to further reduce impacts.

G. What public benefits will be realized from this project?:

The public will benefit from: a) better fish habitat and trout numbers on public land; b) better wildlife habitat (riparian shrub communities support grouse, moose, neotropical migratory birds), and c) better water quality.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

All the project activities are on public land (USFS), and no water rights are affected.

I. Will the project result in the development of commercial recreational use on the site?: (explain):

No. There is some recreational use of this area for camping and hunting. But there is no commercial use.

J. Is this project associated with the reclamation of past mining activity?:

No.

Each approved project applicant must enter into a written agreement with Montana Fish, Wildlife & Parks specifying terms and duration of the project. The applicant must obtain all applicable permits prior to project construction. A competitive bid process must be followed when using State funds.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:



Date:

30 Nov. 2017

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

NF Dry Cottonwood Creek habitat enhancement

Mail To: Montana Fish, Wildlife & Parks
Fisheries Division
PO Box 200701
Helena, MT 59620-0701

E-mail To: Michelle McGree
mmcgree@mt.gov

(electronic submissions MUST be signed)

Incomplete or late applications will be rejected and returned to applicant.
Applications may be rejected if this form is modified.

*****Applications must be signed and *received* by the Future Fisheries Program Officer in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

NE Dry Cottonwood Creek habitat enhancement
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Both tables must be completed or the application will be returned

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES**	IN-KIND CASH	TOTAL
<u>Personnel</u>								
Survey	1	day	\$480.00	\$ 480.00		480.00	-	\$ 480.00
Design		day		\$ -				\$ -
Engineering		day	\$960.00	\$ -				\$ -
Permitting	1	day	\$480.00	\$ 480.00			480.00	\$ 480.00
Oversight	8	day	\$480.00	\$ 3,840.00			3,840.00	\$ 3,840.00
Felling labor	2	crew weeks	\$5,000.00	\$ 10,000.00	-		10,000.00	\$ 10,000.00
			Sub-Total	\$ 14,800.00	\$ -	\$ 480.00	\$ 14,320.00	\$ 14,800.00
<u>Travel</u>								
Mileage	600	miles	\$0.53	\$ 318.00	-		318.00	\$ 318.00
Per diem				\$ -				\$ -
			Sub-Total	\$ 318.00	\$ -	\$ -	\$ 318.00	\$ 318.00
<u>Construction Materials***</u>								
Fiberglass tank 500 gal	1	units	\$750.00	\$ 750.00		750.00		\$ 750.00
1.25" HDPE pipe	350	feet	\$0.95	\$ 332.50	332.50			\$ 332.50
Perf pipe and spring boxes	1	units	\$200.00	\$ 200.00	200.00			\$ 200.00
gravel for intakes	4	yds	\$25.00	\$ 100.00	100.00			\$ 100.00
plumbing fixtures	1	set	\$100.00	\$ 100.00	100.00			\$ 100.00
road mix (tank pads)	4	yds	\$25.00	\$ 100.00	100.00			\$ 100.00
4-strand barbed wire fence	1250	feet	\$1.50	\$ 1,875.00	1,875.00		-	\$ 1,875.00
barbed wire laydown fence	1100	feet	\$3.00	\$ 3,300.00	1,800.00		1,500.00	\$ 3,300.00
Rail/worm fence	800	feet	\$8.00	\$ 6,400.00	3,400.00		3,000.00	\$ 6,400.00
			Sub-Total	\$ 3,457.50	\$ 7,907.50	\$ 750.00	\$ 4,500.00	\$ 13,157.50
<u>Equipment</u>								
Trak hoe	2	days	\$1,200.00	\$ 2,400.00	2,400.00			\$ 2,400.00
Dump Truck	2	days	\$800.00	\$ 1,600.00	1,600.00			\$ 1,600.00
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -

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BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

				\$ -				\$ -
			Sub-Total	\$ 4,000.00	\$ 4,000.00	\$ -	\$ -	\$ 4,000.00
Mobilization								
heavy equipment			\$800.00	\$ -	800.00			\$ 800.00
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ -	\$ 800.00	\$ -	\$ -	\$ 800.00
TOTALS				\$ 22,575.50	\$ 12,707.50	\$ 1,230.00	\$ 19,138.00	\$ 33,075.50

*Units = feet, hours, inches, lump sum, etc.

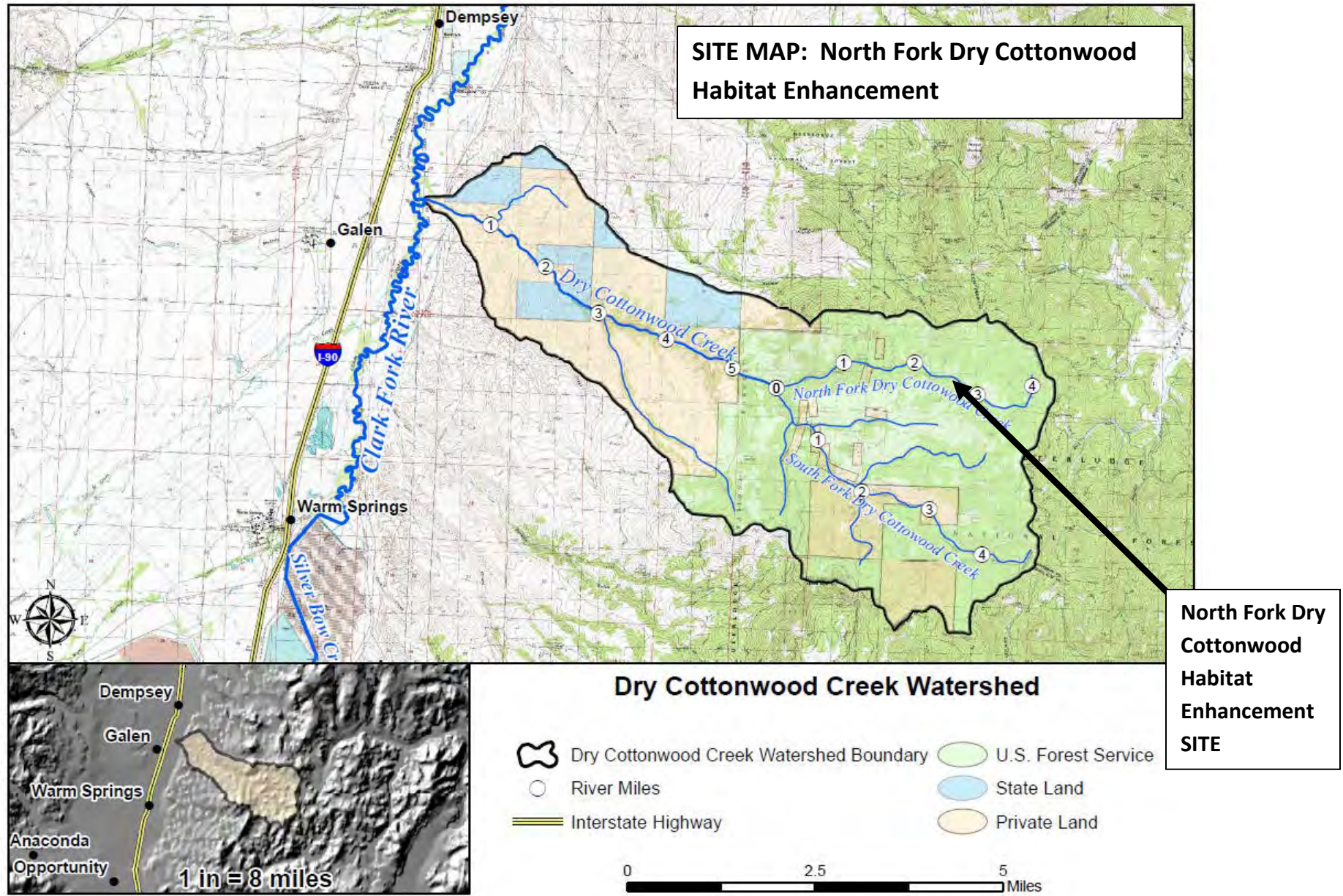
**Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used for calculations). Describe here or in text.

***The Future Fisheries Review Panel recommends a maximum fencing cost of \$1.50 per foot

MATCHING CONTRIBUTIONS (do not include requested funds)

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL	Verified? (Y/N)
US Forest Service (BVDL NF)	\$ 1,230.00	\$ -	\$ 1,230.00	yes
Clark Fork Coalition (private grants)	\$ -	\$ 19,138.00	\$ 19,138.00	yes
	\$ -		\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ 1,230.00	\$ 19,138.00	\$ 20,368.00	

NF Dry Cottonwood Creek habitat enhancement





Fencing Plan NF Dry Cottonwood


Write a description for your map.


NF Dry Cottonwood Creek habitat enhancement

Legend

 Laydown fence

 Meadow fence NEPA NF DryC

 RAIL/WORM FENCE

 Untitled Path



NF Dry Cottonwood Creek habitat enhancement



Fall 2014 Photo of North Fork Dry Cottonwood on USFS grazing allotment. Note hoof shear, over-widened channel and shallow water depth, physical impact to floodplain, loss of dense riparian brush. This type of reach probably has few remaining trout due to lack of habitat. REACH NF-F, top



Upper Clark Cottonwood Creek habitat enhancement

Montana Fish, Wildlife & Parks

P.O. Box 25

Anaconda, MT 59711

Phone: (406) 529-8058

E-mail: jason.lindstrom@mt.gov

November 27, 2017

Montana Fish, Wildlife & Parks
Future Fisheries Program, Attn: Michelle McGree
PO Box 200701
Helena, MT 59620

RE: Support for North Fork Dry Cottonwood Habitat Enhancement Project

I would like to offer my support for this habitat enhancement project proposed by the Clark Fork Coalition in coordination with the U.S. Forest Service. By helping to reduce livestock grazing impacts along the North Fork of Dry Cottonwood Creek, this project will enhance westslope cutthroat trout spawning and rearing habitat on about three miles of stream. Dry Cottonwood Creek and its tributaries (including the North Fork of Dry Cottonwood Creek) support a conservation population of westslope cutthroat trout. No other species such as introduced brook trout or brown trout have been documented in the stream during routine sampling. This makes the Dry Cottonwood Creek drainage relatively unique, and a good location to promote cutthroat trout conservation.

Dry Cottonwood Creek is also a direct tributary (seasonally connected) to the Clark Fork River. This allows for potential recruitment of fluvial, native fish to the river. Currently the upper Clark Fork River is being remediated by DEQ for damages caused by past mining in the Butte and Anaconda areas. Water quality is presently such that native trout have difficulty surviving in the upper reaches of the river. As the cleanup advances and water quality improves, tributaries with native trout populations such as Dry Cottonwood Creek will play an important role in helping to improve the fishery of the upper river. Please feel free to contact me with any questions.

Sincerely,

Jason Lindstrom
Montana Fish, Wildlife & Parks
Fisheries Biologist - Upper Clark Fork

Support for North Fork Dry Cottonwood Creek Habitat Enhancement

I would like to offer my strong support for the North Fork Dry Cottonwood Habitat Enhancement project proposed by the Clark Fork Coalition in cooperation with the U.S. Forest Service (USFS) Beaverhead Deer Lodge Forest, Pintler Ranger District. This culvert is a Forest priority based on our East Deer Lodge Valley Landscape Restoration Management Plan, because it poses an upstream barrier to native fish movement. Reconnecting the tributary westslope cutthroat population to the mainstem of Dry Cottonwood Creek is a valuable investment in conservation of our native cold-water fisheries.

The project is for off-stream stock water, tree felling and riparian fencing all site specific forest priorities based on the EDLV landscape restoration management plan. This work will reduce livestock impacts and enhance aquatic habitat on three miles of high quality cold water fishery supporting native westslope cutthroat trout.

The Pintler Ranger District has worked with CFC on a number of other projects. The amount of work and money they have generated through their dedication and passion for improving the resource has been one of the best relationships the Beaverhead Deer Lodge Forest has with any partner. Not only do they provide excellent ability to identify the best projects, but they also provide expertise and problem-solving to do what is best for the land.

We currently have a Master Participating Agreement with the CFC and with this living document we can continue to propose and implement resource projects which will improve the aquatic environment into the future.

Sincerely,

A handwritten signature in blue ink, appearing to be "Paul [unclear]", written over a horizontal line.

Fisheries Biologist, USFS